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## Report of the Expert Group on International Trade and Economic Globalization Statistics

### Note by the Secretary-General

In accordance with Economic and Social Council decision 2018/227 and past practices, the Secretary-General has the honour to transmit the report of the Expert Group on International Trade and Economic Globalization Statistics. The report summarizes the progress made towards the development of a handbook on accounting for global value chains, which presents a global value chain satellite account through a system of extended national accounts and integrated business statistics from the perspective of the national statistical system. Prepared at the request of the Statistical Commission in 2015 at its forty-sixth session, the handbook will provide a measurement framework for international trade and economic globalization. The present report also sets out a proposal for a high-level group on economic statistics and a related user-centred consultation mechanism through a United Nations global forum on economic statistics. As proposed, the mechanism would serve the Commission in the management and coordination of global economic statistics programmes and provide support to the Commission in response to emerging user demands. The Commission is invited to consider the points for discussion presented in the final section of the report.

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# Report of the Expert Group on International Trade and Economic Globalization Statistics

## I. Introduction

1. By its decision 46/107, the Statistical Commission established the Expert Group on International Trade and Economic Globalization Statistics and tasked it with preparing a handbook on a system of extended national accounts and integrated business statistics to address the challenges that globalization and emerging complex production arrangements pose to compiling macroeconomic and business statistics, including the supporting business registers (see E/2015/24, chap. I.C). The Commission expressed the view that the handbook should build on existing work in this area, in particular the work undertaken under the auspices of the Economic Commission for Europe (ECE), the Organization for Economic Cooperation and Development (OECD) and the Statistical Office of the European Union (Eurostat), and should address issues in linking business-related microdata to trade statistics. At its forty-eighth session, in March 2017, the Commission took note of the report of the Expert Group, which provided information on progress made in the preparation of the handbook, with a view to properly accounting for global value chains while maintaining the perspective of the national statistical system.

2. At its forty-sixth session, the Commission also agreed to establish an intersecretariat working group for international trade and economic globalization statistics, with the request that it develop a mandate covering coordination, data and capacity-building. The Expert Group took forward the request of the Commission.

3. Section II of the present report provides an overview and revised outline of the handbook. Section III presents a proposal for a United Nations high-level group on economic statistics, supported by a biennial United Nations global forum on economic statistics, for which it is proposed to establish a Friends of the Chair group on economic statistics to work out the details of the high-level group's mandate and governance.

## II. Handbook on accounting for global value chains

4. The Expert Group held two meetings in New York in 2016, a meeting in Luxembourg in 2017 and a meeting in Rome in 2018 devoted to the preparation of the handbook. The first meeting was held from 26 to 28 January 2016, at which the terms of reference of the Group, as well as its programme of work, were discussed. The outcome of the meeting was provided in a background document to the report of the Secretary-General to the Commission at its forty-seventh session (E/CN.3/2016/23). The second meeting was held from 29 November to 1 December 2016. The Expert Group reaffirmed that growth in economic globalization and the fragmentation of production called for an enlarged set of economic accounts and business statistics that could provide accurate, timely and relevant macroeconomic and business statistics from a global value chain perspective. The Expert Group discussed the first draft of the handbook at its third meeting, held from 6 to 8 June 2017, and a revised version at the fourth meeting, held from 7 to 9 May 2018.

### A. Objectives of the handbook

5. The global economy is increasingly structured around global value chains that account for a sizable share of international trade, global gross domestic product and employment in both developed and developing countries. The evolution of global value chains in diverse industries, such as agrifood, textiles and apparel, automotive,

electronics, tourism and business services, has significant implications for cross-border trade, production and employment arrangements. Global value chains link firms, workers and consumers around the world and often provide a stepping stone for firms and workers in developing countries to participate in the global economy. For many countries, especially low-income countries, the ability to effectively integrate into global value chains, and eventually upgrade their position therein, is a vital condition for economic development. That supposes an ability to access global value chains, to compete successfully and to "capture the gains" in terms of national economic development, capacity-building and the generation of more and better jobs to reduce unemployment and poverty. Thus, it is not only a matter of whether to participate in the global economy, but also how to do so gainfully.

6. The handbook presents a global value chain satellite account approach through a system of extended national accounts and integrated business statistics from the perspective of the national statistical system. As such, the handbook provides a measurement framework for international trade and economic globalization, as requested by the Commission in 2015 at its forty-sixth session. More specifically, the handbook provides a national perspective on globalization on the basis of a global value chain model that describes the regionally-integrated decomposition of industry-specific global value chains in a multi-country supply chain of goods, services and institutional arrangements. Doing so allows for an integrated presentation of production, income, assets and liabilities by partner country for those global value chain industries that play a significant role in the national economy, resulting in global value chain-specific, multi-country supply and use tables and related institutional sector accounts. By explicitly taking into account the increasing importance of global value chains, global value chain satellite accounts as presented in the handbook will better inform public policies and business decisions on issues related to, for example, growth and productivity, domestic and foreign share of the value-added generated, trade policy, domestic and foreign labour and capital used in the production of goods and services.

7. The handbook provides a high-level overview of how economic statistics can be made more accurate and relevant in measuring the effects of globalization in national accounts, business and trade statistics. It builds on existing standards, guidelines and research, gives an overview of them and directs the reader to the more detailed compendium of background materials and glossary of terms. It will also be helpful to a wide range of compilers in offering alternative solutions, such as microdata linking, data exchange and sharing, indirect estimates using existing data and the use of mixed data for the compilation of global value chain satellite accounts. The handbook also makes clear that, within the overall framework, countries can flexibly (in a modular fashion) implement the satellite accounting approach in accordance with their national priorities for entering or upgrading their role in industry-specific global value chains. Duplication is avoided as much as possible across the various parts of the handbook, while self-contained sections and annexes on the various aspects of macroeconomic accounting and business statistics are provided.

## B. Revised outline of the handbook

8. The final draft of the revised handbook contains the following five parts:

(a) "Accounting for global value chains", which defines global value chains and lays out in what ways existing economic statistics are not suited for measuring global value chains, as well as the policy needs that global value chain accounting can address;

(b) "Global value chain satellite accounts", which includes descriptions of how to define the industrial and geographical boundaries of a global value chain,

classifications, required data and data sources, global value chain-specific national and multi-country supply and use tables, and global value chain-specific national and multi-country institutional sector accounts;

(c) "Integrated business statistics", which provides definitions for business lines and business functions, elaborates on profiling large multinational enterprises, and emphasizes the importance of business registers and global registers and of resolving data inconsistencies in basic economic statistics (e.g., bilateral trade asymmetries);

(d) "Global value chain analysis and policy framework", which demonstrates in-depth how global value chain accounting and resulting data can be used to address specific policy questions;

(e) "Annex", which covers various topics in more detail, including the relationship between global value chain satellite accounts and extended supply and use tables, the data framework of multi-country supply and use tables and input-output tables, empirical challenges in compiling global value chain accounts (such as estimating for missing data) and other conceptual accounting topics (such as factoryless goods production and transactions in intellectual property products).

9. The first part of the handbook documents the policy, business and statistical motivation for the global value chain approach to measuring trade and globalization. It discusses the key measurement issues related to globalization, including the allocation of domestic and foreign value-added share by country, double-counting, bilateral asymmetries and the need for a national perspective on the multi-country production processes of multinational enterprises and global value chains.

10. The second part of the handbook defines global value chains and presents the conceptual framework for global value chain accounting. Details and explanations are provided regarding a number of efforts that have been made in recent years to develop a better understanding of global value chains, including those related to the development of global or regional supply and use tables and input-output tables. Examples in that regard include the trade in value-added database of OECD and the World Trade Organization, the tables provided by the Eurostat project "Full International and Global Accounts for Research in Input-Output Analysis", the World Input-Output Database, and the APEC and the North American trade in value-added initiatives. However, because of the sheer volume of data involved, such tables typically provide only a relatively aggregated view of global value chains, and, moreover, are generally only able to provide a view of global value chains that reflects the generation of value-added in a value chain on the basis of the activity classification of the firms involved in the chain. While significant efforts are being made to improve the quality of current trade in value-added estimates by better capturing the underlying heterogeneity within activities – for example, by focusing on exporting firms and their size and ownership – the Expert Group notes that it will be some time before most countries are able to develop extended supply and use tables and it will take them even longer to develop extended global input-output tables. Therefore, a complementary approach, and the focus of the handbook, is the development of global value chain satellite accounts and associated institutional sector accounts that focus on a specific product or group of products produced within a global value chain among a group of key partner countries.

11. The second part of the handbook lays out the concepts and data needed to compile global value chain satellite accounts. More specifically, it defines the governance structures of global value chains and provides guidance on determining the geographic boundary of global value chain-specific, multi-country supply and use tables; classifying and mapping the relevant business functions, participating firms and products produced in the global value chain; and integrating the global value chain characteristics into multi-country supply and use tables, following exactly the same

principles as those that underpin the development of extended supply and use tables and their integration into multi-country supply and use tables and input-output tables. In addition, the second part of the handbook provides a framework for compiling global value chain-specific, multi-country institutional sector accounts and an extended productivity framework using the "KLEMS" model. The institutional sector extension builds on and links to the work conducted in the Data Gaps Initiative of the Group of 20 on cross-border financial linkages, risks and vulnerability. The extended capital and financial accounts also addresses conceptual issues with respect to multinational enterprises, given that those enterprises are the leading actors in globalization.

12. The third part of the handbook deals with a framework for integrated business, trade and investment statistics for global value chain satellite accounting. The global enterprise perspective is presented first, with the aim of better understanding the business models and business accounting schemes concretely adopted by global enterprises in their day-to-day activities. That is followed by a presentation of the classifications of business lines and business functions and the various types of surveys used to collect information on business functions. It further discusses the need to link and exchange microdata in order to compile global value chain satellite accounts and more fully understand the global activities of multinational enterprises. The third part also contains country and regional examples. It also touches on the reconciliation of bilateral trade asymmetries and efforts to build a global enterprise groups register.

13. The fourth part of the handbook presents the global value chain policy and analytical framework, including the implications for trade policy, the imposition of tariffs and the negotiation of trade agreements; economic development policy, including global value chain upgrading; tax policy; financial regulation; macroeconomic policy; and the impact on labour markets and welfare. This part of the handbook provides numerous country examples.

14. The fifth part of the handbook includes annexes on the relationship between global value chain satellite accounts and the extended supply and use tables, the data framework of multi-country supply and use tables and input-output tables, empirical challenges in compiling global value chain satellite accounts and conceptual accounting topics. Specifically, the empirical challenges discussed include estimating for missing countries in the global value chain satellite account framework; overcoming national data inconsistencies between national accounts and trade statistics; reconciling bilateral trade asymmetries; harmonizing classifications; and international cooperation on data sources and methodologies, among others. The conceptual accounting topics include those not resolved under the research agenda of the ECE "Guide to measuring global production", such as accounting for factoryless goods producers and transactions in intellectual property products.

15. The Expert Group further proposes to post online the original draft chapters of the handbook, originally authored by the members of the Expert Group, in the form of a compendium with a view to providing further reference material on certain topics that are addressed in greater detail in those original chapters.

16. The handbook includes a glossary of terms. Specifically, it defines 97 terms, drawing from existing international standards and manuals (e.g., the *System of National Accounts 2008*,[1] the sixth edition of the *Balance of Payments and International Investment Position Manual*,[2] and *International Merchandise Trade Statistics: Concepts and Definitions 2010*,[3]) whenever possible.

[1] United Nations publication, Sales No. E.08.XVII.29.
[2] International Monetary Fund (Washington, D.C., 2009).
[3] United Nations publication, Sales No. E.10.XVII.13.

## III. Progress made

17. Members of the Expert Group prepared draft chapters of the handbook in May 2017, which were finalized in September 2017 and subsequently reviewed by the Expert Group. The editor of the handbook, the Chair of the Expert Group, and the secretariat, the Statistics Division, prepared revised versions of those chapters in May 2018, which were made publicly available on the website of the Division and were discussed by the Expert Group in a face-to-face meeting in Rome in May 2018.

18. The handbook underwent further revisions, on the basis of comments from the Expert Group. The final version of the handbook will be reviewed by the Expert Group in December 2018 and finalized by the editorial board in January 2019. It will be circulated for global consultation in January and February 2019.

19. Subject to the final review and decision of the Expert Group, the "Handbook on accounting for global value chains: global value chain satellite accounts and integrated business statistics" will be presented as a background document to the fiftieth session of the Statistical Commission in March 2019. The original draft chapters and other research material, which provide more detail on certain topics, will be posted online as a compendium to the handbook to provide further reference material. Following completion of the handbook, it is proposed that the Expert Group be dissolved.

## IV. United Nations high-level group on economic statistics

20. At its thirty-ninth session, in 2008, the Statistical Commission recognized the importance of increasing the coherence of basic economic statistics for enhancing the quality and analytical value of both basic economic statistics and macroeconomic statistics. That recognition subsequently led to several initiatives, such as the development of the Guidelines on Integrated Economic Statistics.[4] At its forty-fourth session, in 2013, the Statistical Commission created the Friends of Chair group on the measurement of international trade and economic globalization, which subsequently became the Expert Group on International Trade and Economic Globalization Statistics in 2015. Its terms of reference included the explicit request to propose an appropriate mechanism for the coordination of work in that domain of economic statistics.

21. The transformative agenda for official statistics, launched by the Statistical Commission in 2015 at its forty-sixth session, emphasized the strategic necessity of transforming national statistical systems and strengthening coordination mechanisms across global, regional and national levels. The agenda responds not only to regular requests for sound official statistics, but also to emerging needs, such as those arising from the 2030 Agenda for Sustainable Development. Those emerging needs call for the integration of data on persons, businesses and locations from survey, administrative and big-data sources. The data integration should meet the new demand for insights into the interrelated dynamics that govern the impact of economic, industrial and business performance on communities, families and persons and their use of the environment and natural resources.

22. These and other initiatives of the Statistical Commission and the United Nations more broadly culminated in the Cape Town Global Action Plan for Sustainable Development Data,[5] which was adopted by the Statistical Commission in March 2017 at its forty-eighth session. Pursuant to the Action Plan, the international statistical community is called upon to take action in the strategic area of modernizing and

[4] United Nations publication, Sales No. E.12.XVII.7.

[5] Available at https://unstats.un.org/sdgs/hlg/Cape-Town-Global-Action-Plan/.

strengthening national statistical systems, with a focus on modernizing the governance and institutional framework; applying statistical standards and new and secure data architecture for data sharing, exchange and dissemination; building multi-stakeholder partnerships for sustainable development data; and facilitating the use of new technology and new data sources in statistical production processes.

23. For the fiftieth session of the Commission, numerous reports are being prepared by various statistical entities, including the Expert Group, on various domains of economic statistics that can be broadly grouped in national accounts, business and trade, and prices. The reports refer to the need for fundamental research on the conceptual framework of economic statistics, the use of new (big) data, data sharing and exchange arrangements between countries, and the emerging role of regional and international agencies in maintaining global enterprise group registers. The reports also clearly point out that those needs have arisen in response to national and international policy frameworks, including the 2030 Agenda and those of the Group of 20 with respect to development, health, education, employment, the digital economy, agriculture, energy, trade and investment, and finance. A comprehensive programmatic review of all domains of economic statistics and statistical activities seems necessary under the umbrella of the conceptual framework of the System of National Accounts. To that end, there will also be a need to discuss arrangements for an institutional mechanism that could ensure the coherence and analytical value of both basic economic statistics and macroeconomic statistics.

24. Against this background, the creation of a high-level group on economic statistics has been proposed, with a view to building on existing internationally agreed initiatives and providing a major impetus in the strategic areas of economic statistics in the Action Plan, including the strengthening of basic statistics and their data integration.

## A. Purpose and objectives

25. The purpose of the high-level group on economic statistics would be to serve as an advisory group to assist the Statistical Commission in responding efficiently and innovatively to emerging issues in economic activity with a coherent global programme on economic statistics across the programmatic elements of the Action Plan relating to sustainable development data.

26. The objectives of the high-level group on economic statistics[6] are to advise the Statistical Commission on, inter alia, strategic multi-year programming for a sustainable system of integrated economic statistics and promoting a current, unified, user-centred and innovative system of economic statistics. It will, therefore, bridge the user and technical communities and prioritize and coordinate the needs of users, serving as input for other domain-specific groups. It is proposed that a United Nations global forum on economic statistics support the high-level group and offer a user-centred consultative process and mechanism. Such a global forum should bring together the main professional groups and stakeholders from the public and private sectors from all parts of the world, including statisticians, economists, policy analysts, academics, data suppliers and other data users.

27. The high-level group on economic statistics is expected to undertake regular technical reviews and identify priority areas among emerging issues and thematic areas of regional and international economic policy frameworks. On the basis of those regular assessments, it will make recommendations to the Statistical Commission on economic statistics and their integration into the production and organization of

[6] See the list of domains for integrated economic statistics annexed to the Guidelines on Integrated Economic Statistics.

statistics with respect to global coordination, advancement of methods, access to and use of data and technology, institutional development and capacity-building, and prepare multi-year programmes to support their implementation at the national, regional and international levels.

## B. Friends of the Chair

28. It is proposed to create a Friends of the Chair group on economic statistics to prepare: (a) the mandate and governance of the high-level group on economic statistics; (b) the agenda and modalities of the United Nations global forum on economic statistics; and (c) a multi-year programme of work on economic statistics, for the consideration of the Statistical Commission in March 2020 at its fifty-first session. With respect to the mandate and governance of the high-level group, the Friends of the Chair will advise on the composition and structure of the high-level group and its programme of work. More specifically, it should reflect on the composition of the high-level group by considering regional representation and existing regional mechanisms to ensure equitable regional representation, the interests of users of statistics and technical expertise. Considering the strategic purpose and objectives of the high-level group, it would be appropriate to include high-level representation of the major users of and stakeholders in economic statistics.

29. Furthermore, it is proposed that the Friends of the Chair group consult widely through meetings with regional and international bodies and agencies, including the regional commissions. To determine its programme of work in 2019, the Friends of the Chair group will organize a meeting in April or May 2019 at United Nations Headquarters to review the main emerging issues and new thematic areas in economic statistics and determine a roadmap for regional and international consultations, including the first United Nations global forum on economic statistics, in 2019.

# V. Points for discussion

30. **The Statistical Commission is invited:**

(a) **To take note of the "Handbook on accounting for global value chains: satellite accounts and integrated business statistics" and the activities of the Expert Group and to encourage countries to use the global value chain satellite accounts in their compilation and dissemination of economic statistics;**

(b) **To thank the Expert Group for its work and dissolve the Group;**

(c) ***To endorse the proposal for the establishment*** **of a high-level group on economic statistics and a related user-centred consultation mechanism through a United Nations global forum on economic statistics, and for the proposed Friends of the Chair group on economic statistics to report back to the Commission in 2019 on the mandate and governance of the high-level group, the agenda and modalities of the global forum, and the multi-year programme of work on economic statistics for the Commission.**